

STAFF REPORT



PROPOSED COUNTY CODE AMENDMENT



PROPOSED PFM AMENDMENT



APPEAL OF DECISION



WAIVER REQUEST

Proposed amendments to Chapter 118 (Chesapeake Bay Preservation Ordinance) of The Code of the County of Fairfax, Virginia, and to the Public Facilities Manual RE: Reclassification of Perennial Streams.

Authorization to Advertise

May 15, 2006

Planning Commission Hearing

June 15, 2006

Board of Supervisors Hearing

July 31, 2006

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May 15, 2006

STAFF REPORT

A. Issues:

Proposed amendments to the Chapter 118 (Chesapeake Bay Preservation Ordinance) of *The Code of the County of Fairfax, Virginia*, and to the Public Facilities Manual (PFM) to address issues related to the reclassification of streams from perennial to intermittent.

B. Recommended Action:

Staff recommends that the Board of Supervisors adopt the proposed amendments to the Chesapeake Bay Preservation Ordinance and the PFM.

C. Timing:

Board of Supervisors authorization to advertise – May 15, 2006

Planning Commission Public Hearing – June 15, 2006

Board of Supervisors Public Hearing – July 31, 2006

Effective Date – upon adoption

D. Source:

Department of Public Works and Environmental Services.

E. Coordination:

The proposed amendments have been prepared by the Department of Public Works and Environmental Services (DPWES) and coordinated with the Office of the County Attorney.

F. Background:

The proposed amendments were initiated by a November 15, 2004, Board Matter from Supervisor Smyth to amend the requirements for reclassifying perennial streams. Follow-up discussions were held with the Board Environmental Committee on December 6, 2004, and March 28, 2005. Discussions also were held with the Environmental Quality Advisory Council (EQAC) on February 9, 2005, and October 11, 2005, at which time a draft of the proposed amendments was provided to EQAC. EQAC adopted a resolution and recommended some changes to the draft amendments [attached]. The proposed amendments to the PFM have been

recommended for approval by the Engineering Standards Review Committee. The proposed amendments also have been reviewed by staff of the Department of Conservation and Recreation, Division of Chesapeake Bay Local Assistance (DCR-DCBLA).

On July 7, 2003, the Board adopted amendments to the Chesapeake Bay Preservation Ordinance and the PFM. The Board also adopted related amendments to Chapter 101 (Subdivision Ordinance), Chapter 104 (Erosion and Sedimentation Control), and Chapter 112 (Zoning Ordinance) of the Fairfax County Code at that time. The amendments implemented revisions to the Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 10-20 et seq.) (Regulations) which required that Resource Protection Areas (RPAs) be designated around all water bodies with perennial flow. The amendments to the various ordinances and PFM became effective on November 18, 2003, following the Board's adoption of amendments to the map of Chesapeake Bay Preservation Areas depicting perennial streams and revised RPA boundaries [2003 map]. The RPA boundaries added to the 2003 map are based on field studies conducted by the Department of Public Works and Environmental Services (DPWES) in 2002-2003 to identify all perennial streams throughout Fairfax County using a scientific protocol developed by DPWES and approved by the Chesapeake Bay Local Assistance Board. Additional amendments to the 2003 map were adopted by the Board on July 11, 2005, and December 5, 2005, to incorporate the results of a Quality Assurance/Quality Control (QA/QC) study conducted by DPWES in 2004.

The scientific protocol used to identify the perennial streams depicted on the map is a rapid assessment tool that uses hydrological, physical, and biological indicators to classify streams based on a onetime visit. It is predictive tool and does not constitute a definitive determination that a stream is perennial or intermittent. In accordance with State guidelines and after discussions with the Planning Commission, provisions were included in PFM § 6-1704.4A to provide for reclassification of a stream segment from perennial to intermittent in the limited circumstance that observational data is provided clearly proving such stream segments to be dry during a non-drought period. To date, only three stream segments have been reclassified using this procedure. The Board requested that staff review the existing provisions for reclassification of streams from perennial to intermittent. The proposed amendments are a response to that request.

G. Discussion:

The Chesapeake Bay Preservation Ordinance, as adopted, requires a stream to be both perennial and depicted on the map as perennial to be subject to regulation as a "water body with perennial flow." A stream depicted on the map as perennial that does not, in fact, exhibit perennial flow does not meet both these requirements. As a result, such streams may be administratively reclassified as intermittent without a public hearing. Like the current provisions, the proposed PFM provisions that will allow streams to be administratively reclassified as intermittent based on

observations of the absence of stream flow during periods that are not abnormally dry are intended to provide relief to property owners in cases where a stream may have been incorrectly classified as perennial using the protocol. As set forth in the State guidelines, observations of the absence of water flow during periods that are not abnormally dry are conclusive proof that a stream is intermittent. Consequently, no change to this process is proposed.

For a stream to be reclassified from intermittent to perennial, the Chesapeake Bay Preservation Ordinance provides that it must be added to the map, which would require public hearings before the Planning Commission and the Board. An administrative action by the Board authorizing the public hearings also would be required. The overall process of amending the map would typically be initiated in response to a request from a Board Member to review a stream classification that results in staff determining the original classification of a stream as intermittent is incorrect and a stream is perennial. At the time such reclassifications occur, the Board also may want to provide on a case-by-case basis some consideration for the treatment of pending plans that would be impacted by the reclassification similar to that provided for pending plans impacted by the general map updates. Unless inadvertently missed, streams proposed to be reclassified from intermittent to perennial would have been evaluated at least once previously using the protocol and classified as intermittent. Therefore, it is reasonable to require a public hearing process for such reclassifications. This provides affected property owners with some degree of certainty that the upstream limits of perennial streams as depicted on the map can be relied upon in planning construction projects and that RPA designations will not be placed on their property without going through the same process that established the other existing perennial streams and RPAs. No change to this process is proposed.

As detailed below, proposed changes to the PFM's technical requirements for reclassification of perennial streams will better define what observational data is necessary to support a reclassification and under what conditions such observations may be made. A requirement for notification of adjoining property owners, home owner's and civic associations, the district Board Member, and Board Chairman that a study to reclassify a stream from perennial to intermittent also is proposed for incorporation in the Chesapeake Bay Preservation Ordinance. Additionally, at the request of DCR-DCBLA, a change in the definition of "water body with perennial flow" is proposed to more closely align it with published DCR-CBLA guidance [attached]. This change includes relocation of parts of the existing definition to § 118-1-7(b). The change to the definition will not affect the designation of perennial streams in the County.

In a memorandum dated January 18, 2006, EQAC transmitted a resolution and recommended changes to the draft language (dated October 7, 2005) that was provided to EQAC on October 11, 2005. As noted in EQAC's memorandum, the two essential features of EQAC's proposal are as follows:

- 1) Determinations [of perennality] are made at the bottom of the sediment bed or of dynamic pools within the sediment bed; and
- 2) The final determination (or verification), after the required studies are submitted by the owner/developer, will be made by the county staff.

In staff's view, the proposed amendments satisfactorily address EQAC's resolution and the additional language recommended by EQAC, which was based on an early draft, is not needed. It is also important that staff's proposed language has been fully vetted with DCR-DCBLA.

F. Proposed Amendments:

Chesapeake Bay Preservation Ordinance:

The proposed amendments include the following provisions:

1. Revisions to the definition of "water body with perennial flow" to: add drainage ditches or channels constructed in wetlands or from former natural drainageways to the list of types of water bodies that may have perennial flow; replace the requirement for water to be flowing year-round except during periods of drought with a requirement for water to be flowing year-round during periods of normal precipitation; and relocate the requirement for perennial streams to be depicted on the adopted map and methods of measuring the width of perennial streams to § 118-1-7(b).
2. A new requirement for notification of adjoining property owners, local HOA or civic association, the district Board Member, and Board Chairman that a study to reclassify a stream from perennial to intermittent has been submitted.
3. Deletion of an incorrect section reference in § 118-6-9.

PFM:

The proposed amendments include the following provisions:

1. Various editorial changes.
2. Deletion of the requirement for developers to perform site specific evaluations to identify perennial streams in areas where evaluations have not been performed by DPWES. Such studies became unnecessary after completion of the DPWES field studies and adoption of the map that identifies all perennial streams throughout Fairfax County.
3. A new requirement for use of the U.S. Drought Monitor to determine the general hydrologic conditions at the time observations of the absence of stream flow are made. Observations of the absence of stream flow will not be accepted as

definitive proof that a stream is intermittent if the U.S. Drought Monitor classification is abnormally dry or dryer at any time during a period extending from 20 days prior to the date when the first set of observations are made through 20 days after the date when the second set of observations are made.

4. A new requirement that observations of the absence of stream flow be made at the following locations:
 - Every 50 feet or less along the channel beginning a minimum of 150 feet downstream from the property line to a point 150 feet upstream the terminus of the perennial stream as depicted on the adopted map of Chesapeake Bay Preservation Areas.
 - At all control sections within the study reach, and at the nearest control section upstream and downstream from the property boundary. A control section is a culvert or other section with a hard bottom where even minute amounts of flow would be readily visible.
5. A requirement that two sets of observations at the above locations must be made a minimum of 7 days and a maximum of 30 days apart.
6. A requirement that observations shall be made at the true channel bottom which is located below the movable bed material. Where the channel bed is armored, the presence of flow within the armoring layer must be checked.
7. A requirement that DPWES shall be advised prior to or within 3 days of completion of the first set of observations. DPWES will perform a field review as part of the evaluation of the reclassification study. DPWES will establish an internal policy to notify the Board member's office in whose district the stream is located of the time and date of DPWES's field review and will coordinate the field review with the second visit to the site by the agent of the landowner whenever possible. Where there are small pools of water that do not appear to be moving, dye or other methods may be used by DPWES to determine if water is flowing from pool to pool.
8. Requirements for the submission of studies to reclassify streams from perennial to intermittent including the following:
 - Cover sheet with project name, County plan identification number, vicinity map, tax map reference, and fee computation.
 - A narrative describing how, when, and where the observations were made, the weather conditions at the time the observations were made, and the study's final conclusion on whether the stream is perennial or intermittent.
 - Plan sheet(s) with topography showing the RPA boundary from the adopted Chesapeake Bay Preservation Area maps, locations of points where observations were made with a key to the photographic documentation

provided, the point at which the stream transitions from perennial to intermittent and the revised RPA boundary.

- Meteorologic data. Daily precipitation, maximum and minimum temperature, and cloud cover from the nearest National Weather Service weather station for a period of 20 days preceding the date that the first set of observations were made through 20 days after the date when the second set of observations were made. The weekly U.S. Drought Monitor classification for a period of 20 days prior to the date that the first set of observations were made through 20 days after the date when the second set of observations were made. The County may use meteorologic data from local rain gage stations closer to the site in evaluating the reclassification request.
- Observations of streamflow. The date, time, name of the observer, weather conditions at the time of observation, and photographs looking upstream and downstream documenting each observation.

H. Regulatory Issues:

The proposed amendments will make it more difficult to reclassify streams from perennial to intermittent. However, the proposed amendments also provide additional assurance that the reclassifications are appropriate and that there is transparency in the process.

I. Attached Documents:

Proposed amendments to the Chesapeake Bay Preservation Ordinance
Proposed amendments to the Public Facilities Manual
Memorandum from EQAC to Board of Supervisors et al, dated January 18, 2006
Determinations of Water Bodies with Perennial Flow, Virginia Department of
Conservation and Recreation, September 2003